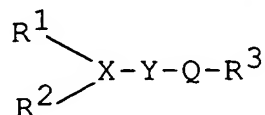


CLAIMS

1. A compound of the formula:



wherein R^1 and R^2 are each aryl or ar(lower)alkyl, or
are taken together to form lower alkylene
or lower alkenylene, each of which may be
substituted with aryl or may be condensed
with a cyclic hydrocarbon optionally
substituted with lower alkyl, lower
alkoxy, aryl, aryloxy or halogen,

R^3 is lower alkyl, lower alkoxy, aryl, arylamino
or aryloxy, each of which may be
substituted with lower alkoxy or halogen,
pyridyl, or pyridylamino,

X is CH or N,

Y is a single bond or -NH-, and

Q is $\begin{array}{c} O \\ || \\ -C- \end{array}$,

provided that

1) when R^3 is arylamino which may be substituted with
lower alkoxy or halogen, or pyridylamino,

then X is CH or

Y is a single bond,

2) when R^1 and R^2 are taken together to form pentenylene
condensed with benzene optionally substituted
with lower alkyl, lower alkoxy, aryl or
halogen,

X is CH,

Y is -NH-, and

Q is $\begin{array}{c} O \\ || \\ -C- \end{array}$,

then R^3 is phenyl substituted with halogen,
phenylamino substituted with halogen, or
pyridyl, or

3) when R^1 and R^2 are taken together to form butenyne
condensed with benzene,

X is CH,

Y is -NH-, and

Q is $\begin{array}{c} \text{O} \\ \parallel \\ -\text{C}- \end{array}$,

then R^3 is phenyl substituted with halogen, and the
indan ring to form by taking together
 R^1 , R^2 and X is substituted by -Y-Q- R^3 at the
2-position,

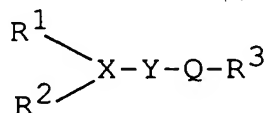
and its salt.

2. A compound according to claim 1, wherein
 R^1 and R^2 are taken together to form lower alkenylene
which may be substituted with aryl or may be
condensed with benzene optionally substituted with
lower alkoxy,
 R^3 is aryl or arylamino, each of which may be
substituted with halogen, pyridyl, or pyridylamino.
3. A compound according to claim 2, wherein
X is N.
4. A compound according to claim 2, wherein
X is CH, and
Y is -NH-.
5. A compound according to claim 3, wherein
 R^1 and R^2 are taken together to form methylpentenyne
or pentenyne which may be condensed with benzene,
and
 R^3 is arylamino which may be substituted with halogen,

or pyridylamino.

6. A compound according to claim 4, wherein
 R^1 and R^2 are taken together to form methylpentenylene,
 5 butenylene condensed with benzene, or pentenylene which
 may be condensed with benzene optionally substituted
 with lower alkoxy.

7. A compound of the formula:



wherein R^1 and R^2 are each aryl or ar(lower)alkyl, or
 15 are taken together to form lower alkylene
 or lower alkenylene, each of which may be
 substituted with aryl or may be condensed
 with a cyclic hydrocarbon optionally
 substituted with lower alkyl, lower
 20 alkoxy, aryl, aryloxy or halogen,

R^3 is lower alkyl, lower alkoxy, aryl, arylamino
 or aryloxy, each of which may be
 substituted with lower alkoxy or halogen,
 pyridyl, or pyridylamino,

25 X is CH or N,

Y is a single bond or -NH-, and

Q is $\begin{array}{c} O \\ || \\ -C- \end{array}$,

provided that

- 30 1) when R^3 is arylamino which may be substituted with
 lower alkoxy or halogen, or pyridylamino,

then X is CH or

Y is a single bond,

- 2) when R^1 and R^2 are taken together to form pentenylene
 35 condensed with benzene optionally substituted

with lower alkyl, lower alkoxy, aryl or
halogen,

X is CH,

Y is -NH-, and

Q is $\begin{array}{c} \text{O} \\ \parallel \\ -\text{C}- \end{array}$,

then R³ is phenyl substituted with halogen,
phenylamino substituted with halogen, or
pyridyl, or

3) when R¹ and R² are taken together to form butenylene
condensed with benzene,

X is CH,

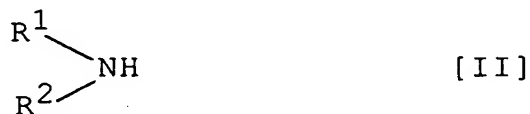
Y is -NH-, and

Q is $\begin{array}{c} \text{O} \\ \parallel \\ -\text{C}- \end{array}$,

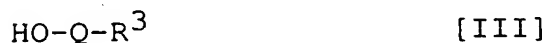
then R³ is phenyl substituted with halogen, and the
indan ring to form by taking together
R¹, R² and X is substituted by -Y-Q-R³ at the
2-position,

or its salt, which comprises,

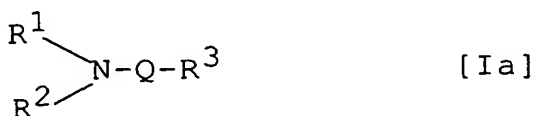
1) reacting a compound of the formula:



or its salt with a compound of the formula:

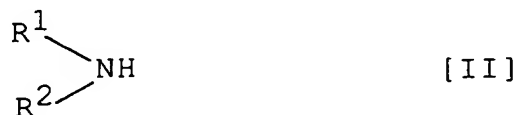


or its reactive derivative at the carboxy group
or a salt thereof to provide a compound of the formula:



or its salt, in the above formulas,
 R^1 , R^2 , R^3 and Q are each as defined above, or

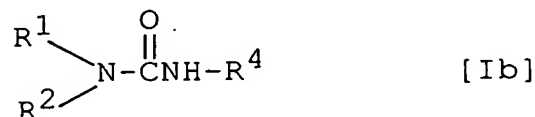
2) reacting a compound of the formula:



or its salt with a compound of the formula:

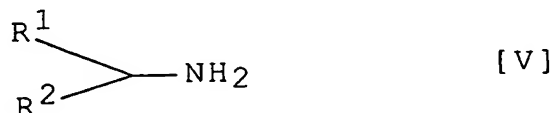


to provide a compound of the formula:



or its salt, in the above formulas,
 R^1 and R^2 are each as defined above, and
 R^4 is aryl which may be substituted with lower alkoxy
 or halogen, or pyridyl, or

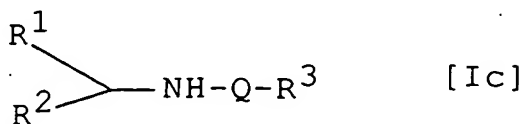
3) reacting a compound of the formula:



or its salt with a compound of the formula:

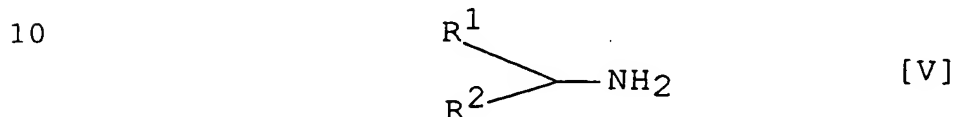


or its reactive derivative at the carboxy group
 or a salt thereof to provide a compound of the formula:

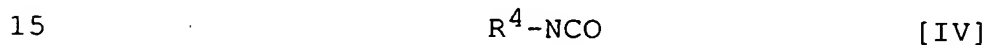


5 or its salt, in the above formulas,
 R^1 , R^2 , R^3 and Q are each as defined above, or

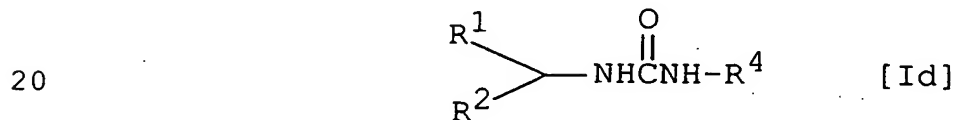
4) reacting a compound of the formula:



or its salt with a compound of the formula:

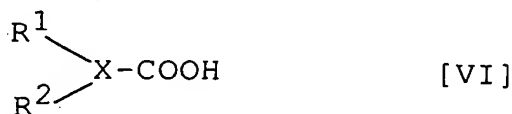


to provide a compound of the formula:



or its salt, in the above formulas,
 R^1 , R^2 and R^4 are each as defined above, or

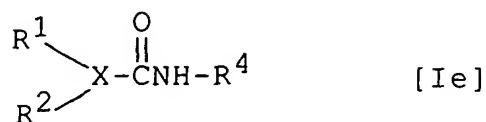
5) reacting a compound of the formula:



or its reactive derivative at the carboxy group or a
 salt thereof with a compound of the formula:



or its salt to provide a compound of the formula:

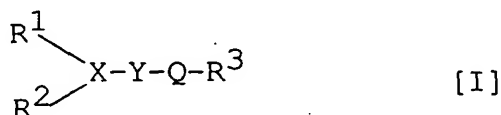


5

or its salt, in the above formulas,

R^1 , R^2 , R^4 and X are each as defined above.

- 10 8. A pharmaceutical composition comprising a compound of claim 1, as an active ingredient, in association with a pharmaceutically acceptable, substantially non-toxic carrier or excipient.
- 15 9. A compound of claim 1 for use as a medicament.
- 20 10. A method for therapeutic treatment and/or prevention of amnesia or dementia which comprises administering an effective amount of a compound of the following formula to mammals.



- 25 wherein R^1 and R^2 are each aryl or ar(lower)alkyl, or are taken together to form lower alkylene or lower alkenylene, each of which may be substituted with aryl or may be condensed with a cyclic hydrocarbon optionally substituted with lower alkyl, lower alkoxy, aryl, aryloxy or halogen,
- 30 R^3 is lower alkyl, lower alkoxy, aryl, arylamino or aryloxy, each of which may be substituted with lower alkoxy or halogen,
- 35 pyridyl, or pyridylamino,

X is CH or N,

Y is a single bond or -NH-, and

Q is $\begin{array}{c} \text{O} \\ \parallel \\ -\text{C}- \end{array}$,

or its salt.

11. Use of the compound as defined in claim 10 for manufacture of a medicament for treating and/or preventing amnesia or dementia in mammals.